REMARKS

The Office Action was mailed in the present case on October 3, 2008, making a response due on or before January 3, 2009. This response is being timely submitted.

The Examiner has issued a restriction requirement in the case between Claims 1-6 drawn to a calco-magnesium suspension, and Claim 7 drawn to a method of making such a suspension. Applicant hereby affirms the election to prosecute Claims 1-6, without traverse, and without prejudice toward filing a divisional application containing non-elected Claim 7. In this response, Applicant has amended method Claim 7 to include all of the limitations of product Claim 1, as amended, in order to allow rejoinder of method Claim 7 in the event Claim 1 is now deemed allowable by the Examiner.

The Examiner objected to the form of the Abstract in that the Abstract, as submitted, contained less than 50 words. Applicant has submitted a revised Abstract with this response. The additional text which was added to the Abstract was taken from page 3, lines 14-18 of the original Specification and thus does not constitute new matter.

The Examiner has also objected to the language of the Specification as failing to provide adequate support for the definition of "d_{98} granulometric dimension." However, Applicant would respectfully point out that "d_{98} granulometric dimension" in Claim 6 is defined in Example 1, lines 14 to 17, as well as the definition for "d_{50}" and for "d_{90}", as follows:

> "The distribution of the particle sizes is measured by means of a laser granulometer; these distributions are characterised in terms of d_{50}, d_{90} and d_{98}, interpolated values of the particle size distribution curve. The dimensions d_{50}, d_{90} and d_{98} correspond to the dimensions for which respectively 50%, 90% and 98% of the particles are less than the said dimensions."

Applicant has amended the language of Claim 6 in this response to include a paraphrased definition of the term "d_{98}." In view of the above explanation of the term, as contained in the Specification as originally filed, Applicant would respectfully request that the Examiner's objection as to the language of original Claim 6 be withdrawn.

The Examiner has substantively rejected Applicant's originally submitted Claims 1-4 and 6 under 35 U.S.C. §102(b) as being anticipated by Sato et al. (JP 1027334). The Examiner argues that Sato et al. anticipates a slaked lime aqueous suspension, which is a particular case of calco-magnesian aqueous suspension, with the surface area, which would be inherently measured by the BET method, between 5 and 20 m^2/g. The Examiner goes on to argue that the further limitation of dependent Claims 3, 4 and 6 would also be met by the teaching of Sato et al.

The Examiner has also rejected Applicant's Claim 5 under 35 U.S.C.§102(b) as being anticipated, or in the alternative under 35 U.S.C. §103(a), as being obvious over Sato et al. The Examiner argues that Sato discloses a slaked lime aqueous suspension that has a solid content of 0.1 to 30%; that the suspension in the instant case has a solid matter content greater than 25% and thus would be anticipated by Sato or, alternatively rendered obvious over Sato as a prima facie case with an overlapping range.

Applicant's independent product Claim 1 describes a novel calco-magnesian aqueous suspension having particles of solid matter with, before being put in suspension, a specific surface area, calculated according to the BET method, which is less than or equal to 10 m^2/g. Also, in view of the Examiner's remarks, independent Claim 1 has now been amended so that it describes such a calco-magnesian aqueous suspension which is further characterised in that is has a solid matter content greater than or equal to 32% by weight. Support for the amended limitation "greater than or equal to 32% by weight" can be found, for example, generally at page 6, lines 19-22, and more specifically in Example 3 which specifically mentions a solid matter content of 32% and 40%, Example 4 which mentions 35%, Example 5 which mentions 45% and Example 6 which mentions 34, 39 or 45%. This express teaching contained in the examples of the original patent specification provide clear

support for a preferred range of solid matter of greater than or equal to 32% and no new matter is being introduced.

Turning now to the teaching of the Sato et al. reference, Sato et al. discloses a slaked lime aqueous suspension of 0.1 to 30% of the weight of solids concentration in which the specific surface area X of the slaked lime particles is comprised between 5.0 to 20.0 m^2/g, suspended in a limit that does not exceed 150cp.

Thus, Sato et al. teach that the specific surface area before grinding is X and further teaches a grinding treatment until the specific surface of the ground slaked lime particles reaches Y.

Y should satisfy the formula $Y \geq 0.0036\ x^2 + 0.698X + 7.2055$
or preferably the formula $Y \geq 0.0004x^2 + 0.7936X + 9.7185$.

From these formulas, it is therefore clear that, according to the teaching of Sato et al., the value of Y will always largely be greater than X. Sato et al. therefore teaches to increase the specific area by grinding in order to increase the efficiency of the milk of lime as an acidic gas treating agent.

According to the teaching of the present invention, however, there is provided a milk of lime where the solids content is drastically increased thanks to the surprising effect which is caused by the selection of the BET surface area in a range less than or equal to 10 m^2/g, while keeping the viscosity at a low level. This combination of factors is nowhere taught or suggested by the above teaching contained in the Sato et al. reference.

Indeed, as mentioned at page 3, lines 20 to 23 of the description of the present patent application, it has been in fact possible to show a direct relationship between the specific surface area of the particles in suspension and the viscosity of the suspension. Therefore, it has been possible to obtain a suspension having solid matter contents greater than, for example, 32% without requiring the presence of a dispersant.

Of course, according to the teachings of the present invention, a dispersing agent can be added, for example to even further increase the solid matter content, but the dispersing agent is not strictly required in order to produce lime milks according to the invention.

Sato et al. discloses further in each example, the use of a dispersing agent except when the solid content is low, for instance below 7% (see in this regard, paragraphs [0019] to [0022] of Sato et al.) Otherwise, Sato et al. uses a dispersing agent in order to reach an acceptable viscosity value. This is due to the fact that the specific area of the particles is increased by grinding in order to satisfy the formula mentioned above.

In other words, Sato et al. contemplates the use of a specific area comprised in a quite broad range and because said specific area is largely increased during grinding treatment, there is a need for keeping viscosity at an acceptable value, to add a dispersing agent to reach the claimed solid matter content (see especially paragraph [0013] of Sato et al, and each Example in the detailed description) especially when solid content is above 7%.

To summarize, the invention as now described in the language of amended Claim 1 is really easy to carry out by not needing any dispersing agent and the manufacturing costs are, as a consequence, reduced while keeping the purity of the milk of lime according to the invention, as high as possible.

In addition, the milk of lime, due to its high purity, can be used in a wide range of applications (page 10, lines 9-16 of Applicant's Specification) since it is inherently more compatible with several different applications such as the treatment of drinking water.

Further, because the solid matter content can be increased, the product according to the invention is more concentrated, thereby being more reactive, with a resulting reduction in transportation and storage costs (see for example, page 10, lines 9-16 of the present patent Specification).

For the above reasons, Claim 1 can be seen to involve a clear inventive step which distinguishes the teaching of the Sato et al. reference, due to the selection of a specific area value selection, in addition to the requirement of a resulting solid matter content greater than or equal to 32% by weight.

No additional fee is thought to be due at this time. If any additional fee is due for the continued prosecution of this application, please charge the same to Applicant's Deposit Account No. 50-2555 (Whitaker, Chalk, Swindle & Sawyer, LLP).

Respectfully submitted,

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